

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C.

In the Matter of)	
)	
Video Device Competition)	MB Docket No. 10-91
)	
Implementation of Section 304 of the)	
Telecommunications Act of 1996)	
)	
Commercial Availability of Navigation Devices)	CS Docket No. 97-80
)	
Compatibility Between Cable Systems and)	PP Docket No. 00-67
Consumer Electronics Equipment)	

**COMMENTS OF ARRIS GROUP, INC. ON THE
NOTICE OF INQUIRY**

Gaines Carter
of Counsel

Stanley R. Brovont
Senior Vice President
Marketing and Business Development

ARRIS Group, Inc.
3871 Lakefield Road
Suwanee, GA 30024

July 13, 2010

TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY	3
II.	THE ALLVID ADAPTER WILL BE COSTLY AND STIFLE INNOVATION	4
III.	MARKET FORCES ARE ALREADY EXPANDING CONSUMER CHOICES	4
	A. Consumers have more choices than ever before	4
	B. Internet Protocol (“IP”) is driving innovation and consumer choices	5
IV.	MARKET FORCES WILL DRIVE INTERNET PROTOCOL INTO MVPD NETWORKS	6
	A. Internet Protocol has transformed voice and data networks without government mandate	6
	B. Private capital is already being invested in devices that will bring these benefits to MVPD subscribers	6
V.	CONCLUSION	8

I. EXECUTIVE SUMMARY

ARRIS Group, Inc. (“ARRIS”), files these comments in response to the Notice of Inquiry (“*Notice*”) in the above-captioned proceedings.

ARRIS is a U.S.-based manufacturer specializing in the design, engineering, and supply of technology supporting quad-play broadband services for residential and business customers. ARRIS is currently developing a CableCARD based AllVid-like device, the ARRIS Media Gateway, within the existing regulatory and certification framework. The Commission should not attempt to specify the architectures and functionality of such gateway devices as technology innovation and consumer desires change far too rapidly for the Commission to anticipate.

The ARRIS Gateway will provide the functionality that the Commission is pursuing, including enabling the delivery of multichannel video programming distributor (“MVPD”) content, Internet, personal media, and other content to any device in the home, including devices provided by the MVPD as well as subscriber devices purchased at retail. These devices purchased at retail will not need a CableCARD and will require no understanding of the cable network. The ARRIS Gateway achieves this through the use of currently available open interfaces such as digital transmission content protection over Internet Protocol (“DTCP-IP”) and Digital Living Network Alliance (“DLNA”). The Gateway also supports remote software updates to adapt to changing market requirements.

Market forces are driving ARRIS and others toward the Commission’s goal. Commission intervention is unnecessary and could slow innovation essential to expanding the market for retail video devices.

II. THE ALLVID ADAPTER WILL BE COSTLY AND STIFLE INNOVATION

While the Commission's goals for the AllVid adapter are laudable, they are overly ambitious and could impede progress toward a thriving retail market place for video devices. The Commission asks that the adapters address a number of issues that are each quite complex, such as encryption, interactive and transactional services, emergency alert services, parental controls, and closed captioning. Moreover, the Commission raises questions about access to intellectual property rights, something of great importance to manufacturers like ARRIS that make significant investments in innovation and the creation of intellectual property. Technology and consumer behavior change so quickly that it is difficult to imagine that the Commission could specify technologies that will achieve its goals without introducing unintended complications and potentially stifling innovation.

Moreover, a proscriptive approach to physical size, numbers of channels, navigation interfaces etc. will create a rigid environment where consumer electronics companies and MVPD providers alike will have fewer options to innovate.

III. MARKET FORCES ARE ALREADY EXPANDING CONSUMER CHOICES

A. Consumers have more choices than ever before

As noted by the Commission in the Notice of Inquiry, today consumers have more choices than ever before in the types of devices used to search and acquire video content and the business arrangement surrounding the consumption of that content. Video game

devices, retail Digital Video Recorders, home theater computers, Internet enabled televisions, proprietary service-specific hardware, and mobile handsets all can access various types of video content. Consumers also have a rapidly expanding number of choices in the business models surrounding their consumption of this content, including advertising supported “free” content, subscription content, fee based on demand or pay-per-view content, and access to content based on purchasing a specific consumer electronics product. These arrangements and combinations of them are proliferating today without the AllVid device specification. Commission efforts to regulate this burgeoning market could limit the innovation, competition, and consumer choice that is already occurring within the industry.

B. Internet Protocol (“IP”) is driving innovation and consumer choices

A cursory examination of the many choices available to consumers for finding and acquiring video content reveals they are almost exclusively based on IP distribution of the content, or at the very least, IP communication back to a central server. As an inherently open interface that supports rapid innovation and interoperability, IP is providing the open environment the Commission understands is essential to improved consumer choice. By integrating IP into the subscriber’s home network many new services can be cost effectively enabled, including:

- Sharing personal media within the home and over the Internet
- Watching Internet video on any device including a home theater
- Watching stored content on any device in the home
- A common User Interface for all content and devices
- Remote programming of video storage devices

The flexibility, open standards nature, and cost effectiveness of IP are the primary enablers for this innovation and consumer choice, which is being created without government mandate or regulation.

IV. MARKET FORCES WILL DRIVE INTERNET PROTOCOL INTO MVPD NETWORKS

- A.** Internet Protocol has transformed voice and data networks without government mandate

While the Commission is accurate in stating that by defining RJ-11 and Ethernet interfaces it facilitated more openness in the voice and data markets it should be noted that these are connection level interfaces. In the case of both the voice and data industries it was industry associations, standards bodies, and market forces that drove the innovations and agreements on signaling protocols and user interfaces that opened these markets to intense competition and, based on the superiority of Internet Protocols, a fundamental transformation from connection oriented transmission to IP based, connectionless transmission. Innovation in these areas continues to this day. All of this innovation and expansion in consumer choice continues to occur within a very light regulatory environment.

- B.** Private capital is already being invested in devices that will bring these benefits to MVPD subscribers

Today, MVPDs are evaluating Internet Protocol for investment and operational reasons. Using IP to deliver all services, including voice, data, and video, provides the operator with one protocol to manage across the entire network. This simplicity reduces

network management costs and complexity. Moreover, because IP is already an open standard that can reduce or eliminate high-cost, inflexible edge devices designed for one specific service in favor of devices designed to carry traffic supporting all subscriber services. This collapsing of network traffic into a common protocol can also enhance network throughput, reducing the operators' needs for continued investment in higher network capacity.

Internet Protocol distribution also simplifies the device infrastructure between the operator's head end and the home, bringing these same benefits directly to the consumer. Operators can deploy and monitor services holistically across the entire IP network, including devices purchased directly by the consumer. The inherently open nature of IP interfaces foster supplier competition and innovation, along with integration options that are facilitating the vibrant retail market that the Act and the Commission are pursuing. ARRIS and others are investing already in these transformative IP Video Architectures.

The ARRIS IP Video Architecture is designed to accelerate the introduction and deployment of an open, scalable, converged, IP Video service over cable that is both capital and operational expense efficient. The ARRIS IP Video Architecture relies upon the inherently flexible IP domain to preserve the operators' existing MPEG infrastructure investment while ensuring maximum utilization of bandwidth.

The subscriber client component of the ARRIS IP Video Architecture is the ARRIS Whole Home Solution. The ARRIS Whole Home Solution includes a family of Gateway and Media Player products to support hybrid and full IP architectures. These Gateways and Players combine simultaneous use of feature-rich video and telephony services, multi-room DVR, 802.11 b/g/n Wi-Fi, DOCSIS 3.0 data rates, and other

services. This solution provides multi-room subscriber access to unicast and multicast content—whether via cable, over the top, or the subscriber’s personal media on their home network.

V. CONCLUSION

The concept described by the Commission as the “AllVid” adapter could be helpful in achieving the goals of Section 629 if the Communications Act of 1994, as amended. However, the rapid pace of technology innovation and changes in consumer demand are best managed by competitive market forces among equipment manufacturers and service providers. It is not possible for the Commission to anticipate all future consumer demands, technological innovations, or evolving business models that are now and will impact the industry into the future. ARRIS is currently developing an AllVid-like device, the ARRIS Media Gateway, within the existing regulatory and certification framework. The ARRIS Gateway provides the functionality that the Commission is seeking – delivery of MVPD services using open / standard interfaces to both retail and “leased” devices. More regulation is not required.

Gaines Carter
of Counsel

Respectfully submitted,

/s/Stanley R. Brovont
Senior Vice President
Marketing and Business Development

ARRIS Group, Inc.
3871 Lakefield Road
Suwanee, GA 30024

July 13, 2010